ENERGY STAR® Program Requirements for Residential Ceiling Fans

DRAFT 1 Eligibility Criteria – Version 2.0

Below is the **DRAFT 1** product specification (Version 2.0) for ENERGY STAR qualified residential ceiling fans. A product must meet all of the identified criteria to earn the ENERGY STAR.

1) **Definitions:** Below are the definitions of the relevant terms in this document.

   A. Residential Ceiling Fan: A non-portable device designed for home use that is suspended from the ceiling for circulating air via the rotation of fan blades. Some ceiling fans also have an integral or attachable light kit.

   B. Light Kit: A complete lighting unit consisting of a lamp or lamps, and ballasting (when applicable) together with the parts designed to distribute the light, position and protect the lamps, and connect the lamps to the power supply. Light kits can be:

      - Integral – the light kit is attached to the ceiling fan housing at the time of purchase. This type of a light kit is integrated into the bottom cap of the fan and cannot be removed or replaced with another light kit.

      - Attachable – the light kit is not, at the time of sale, physically attached to the fan. The light kit must be attached to the ceiling fan for the lights to work. Attachable light kits might be included inside the ceiling fan box at the time of sale or sold separately for subsequent attachment to the fan.

> **Note:** For consistency and technical clarification, the definition of a light kit has been changed to reflect the definition used for "light fixture" under the ENERGY STAR Residential Light Fixture specification.
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> During the Dallas ceiling fan industry meeting held in June 2002, a number of partners indicated that the current definition for integral light kit is incorrect. Integral light kits are not actually "hardwired" to the fan; there is still some assembly required. The reference to "hardwired" has been removed and the definition expanded for clarification.

   C. Controls: Controls enable the user to turn on/off or adjust the lighting and fan movement. Controls may be in the form of pull chain, slide switch, wall switch/panel, or remote control.

   D. Airflow: The rate of air movement at a specific fan setting expressed in cubic feet per minute (CFM). Airflow is determined from testing done using the Solid State Test Method as defined in EPA's *ENERGY STAR Testing Facility Guidance Manual: Building a Testing Facility and Performing the Solid State Test Method for ENERGY STAR Qualified Ceiling Fans*.

   E. Airflow Efficiency: The ratio of airflow divided by power at a specific residential ceiling fan setting expressed in CFM per watt (CFM/watt). Airflow and power are determined from testing done using the Solid State Test Method as defined in EPA's *ENERGY STAR Testing Facility Guidance Manual: Building a Testing Facility and Performing the Solid State Test Method for ENERGY STAR Qualified Ceiling Fans*.

   F. Power Consumption: The active power expressed in watts. Power consumption is measured during residential ceiling fan testing at a specific speed using the test procedure described in EPA's *ENERGY STAR Testing Facility Guidance Manual: Building a Testing Facility and Performing the Solid State Test Method for ENERGY STAR Qualified Ceiling Fans*.

G. Standby Mode: The lowest power consumption mode which cannot be switched off, or influenced, by the user and that may persist for an indefinite time when the ceiling fan is connected to the main electricity supply and used in accordance with the manufacturer's instructions. Standby mode is a non-operational mode when compared to the intended use of the ceiling fan's primary function; moving air and providing light (when applicable). Energy consumed by a motion sensor, remote control, or other standby device which continues to draw power during fan inactivity, should be included when measuring standby power consumption. Standby power is measured in watts.

Note: In response to partner comments that the definition of standby mode is unclear, it has been rewritten to be more precise and technical, in nature. The new definition included in this Version 2.0 follows the definition of standby mode included in the "Draft International Electrotechnical Commission (IEC) 62301: Household Electrical Appliances – Measurements of Standby Power."

H. Solid State Test Method: A test method that specifies the apparatus and testing protocol for measuring a residential ceiling fan's airflow and power consumption. The method utilizes a hot-wire anemometer and requires a temperature controlled room and computer for recording test data.

I. Hugger Fan: A fan style where the motor mounts directly to the ceiling. Hugger fans are most commonly used in rooms with low ceilings. Hugger fans are manufactured and marketed as such and should not be confused with multi-mount (traditional) fans that can be hung without the down rod, giving the same effect as a hugger fan. Hugger fans are designed to allow installations on 7'6" – 8' height ceilings when using a fan light kit in a location where walking under the fan will occur. **Note: Hugger fans cannot qualify for ENERGY STAR under this Version 2.0 specification.**

Note: The existing definition of hugger fan has been rewritten to distinguish between traditional fans that can be mounted to perform similar to hugger fans versus those models that are truly manufactured as hugger fans.

Hugger fans continue to be excluded from qualification under this Version 2.0 specification due to a lack of sufficient performance data and incompatibility with current testing procedures. In addition, preliminary feedback from partners indicates that hugger fans are considered a niche product with a low market share. Therefore, adding this product is a low priority for EPA.

EPA is interested in collecting additional data for this product category, however, it is not EPA's intention to delay this specification revision process as a result of the additional research that would be required. As such, EPA encourages partners to comment on whether or not the product category should be pursued under this specification. Based on partner interest, EPA will determine whether or not to consider hugger fans in future specification revisions.

2) **Qualifying Products:** In order to qualify as ENERGY STAR, a residential ceiling fan must meet the definition in Section 1A and the specification requirements provided in Sections 3 through 7, below. Ceiling fan light kits, integral and attachable, must meet the definition in Section 1B and the lighting requirements provided in Section 3B, below.

3) **Performance Specification and Lighting Requirements for Qualifying Products:**

Note: Section 3 of the current specification titled "Energy Efficiency Specifications for Qualifying Products" has been restructured and separated into five new sections under this Version 2.0 specification:

- Section 3: Performance Specification and Lighting Requirements for Qualifying Products
- Section 4: Controls
- Section 5: Sound
- Section 6: Warranty
- Section 7: Consumer Information

It is EPA's hope that this new structure will assist partners in reviewing these requirements.

A. Airflow Efficiency

Qualifying products shall meet or exceed the following minimum requirements for total airflow and airflow efficiency when operating in a downward-blowing direction. Models sold with light kits or integrated light sources must be tested with those light sources mounted in their intended position and switched off. The representative models' tested and measured performance may vary by 5 percent and still be deemed compliant with this specification. **Note:** This 5 percent tolerance only applies to models qualifying under Tier I of this Version 2.0 specification; manufacturers that wish to qualify models under Tier II, must meet the absolute minimum requirements listed in Table 2, below.

Tier I

Table 1 – Tier I Specifications for Air Flow Efficiency		
Fan Speed	**Minimum Airflow**	**Efficiency Requirement**
Low	1,250 CFM	155 CFM/watt
Medium	3,000 CFM	100 CFM/watt
High	5,000 CFM	75 CFM/watt

Tier II

Table 2 – Tier II Specifications for Air Flow Efficiency		
Fan Speed	**Minimum Airflow**	**Efficiency Requirement**
Low	1,250 CFM	155 CFM/watt
Medium	3,000 CFM	100 CFM/watt
High	5,000 CFM	75 CFM/watt

Note: During the June 2002 ceiling fan industry meeting, there was some concern among partners regarding the comfort level of the medium speed; the current 2,500 CFM may be too low causing the consumer to elect to set the fan at the higher speed for increased comfort and thus, use more energy. It has been recommended to EPA that the medium speed CFM requirement be increased to 3,000 CFM. Following the motor performance curve between low and high speeds, the CFM/watt requirement would change to 100 CFM/watt, respectively. While this seems to be a relaxation of the current CFM/watt requirement, it is EPA's intention behind this revision is to offer qualified models that provide enough airflow so that the consumer chooses to set the fan on the medium speed rather than the high speed, thus using less energy. EPA is interested in obtaining industry feedback on this new medium speed performance level.

During the development of the current specification, EPA expressed its intention of eliminating the +/- 5 percent tolerance under Tier II. EPA included this tolerance under Tier I to ensure an adequate number of qualified ceiling fan models in the marketplace during the first year of the program while allowing manufacturers additional time to design models that would meet the performance requirements without the 5 percent tolerance.

EPA would like to continue to collect and review fan performance data before determining whether a new and more challenging specification needs to be considered under Tier II. This will allow EPA to build a more extensive performance database needed to analyze and recommend new performance levels while also allowing the program more time to develop and mature. If it is determined that revisions to the Tier II performance requirements are needed, EPA will work with partners in determining the appropriate levels.

Note: The following items, included in the existing specification under Tier II, will be addressed at a later date by EPA:

Additional Fan Size Requirements

There are various fan sizes for different rooms, and different applications, in the house. While it is important that consumers be able to find ceiling fans in the marketplace that have earned the ENERGY STAR, it is also important that they choose the appropriate fan size for their needs. The performance requirements included in the current specification applies to fans of all sizes; however, most of the products that have been tested and submitted to date, have been 52" models. There has been some interest from industry to provide separate requirements for additional fan sizes such as 36" models.

EPA has received some preliminary recommendations regarding specifications for additional fan sizes. Depending on industry interest, EPA will review performance data, made available through testing or industry resources, representing the following fan categories: 24"-36", 37"-49", 50"-59", and 60"-68". This performance data will be analyzed and used to determine whether or not separate performance requirements are warranted and applicable under this specification.

Power Factor

It was determined by existing partners that power factor is a low priority and EPA should address it at a later date. There have been no requests to date from other interested parties regarding the inclusion of a power factor requirement. However, EPA may consider a power factor requirement if there is enough industry interest and data exists that indicates the need for such a requirement.

This specification defines residential ceiling fan airflow efficiency on a performance basis: CFM of airflow per watt of power consumed by the motor and controls. This treats the motor, blades, and controls as a system, allowing multiple approaches to reach a given efficiency level. Efficiency is to be measured on each of three fan speeds (low, medium and high) using the "Solid State Test Method," which is explained in more detail in EPA's *ENERGY STAR Testing Facility Guidance Manual: Building a Testing Facility and Performing the Solid State Test Method for ENERGY STAR Qualified Ceiling Fans*.

Residential ceiling fans capable of operating at more than three speeds must meet the performance levels, specified in Tables 1 and 2, at any three of those total speeds. However, at the time of testing measurements should be taken and reported for all discrete operating speeds. It will be at the discretion of the manufacturer, as to which three speeds it would like to use to pass these testing requirements. If more than three speeds are listed in the Performance Table, required in Section 7 of this specification, manufacturer should indicate which speeds qualify as ENERGY STAR.

Note: During the June 2002 ceiling fan industry meeting, partners suggested that for those fans with more than three speeds, it should be up to the manufacturer to decide which speeds should be tested and qualified. EPA agrees and therefore, a sentence has been added in this Version 2.0 specification to reflect this allowance. For consistency in the packaging, manufacturer should list results of all speeds in the Performance Table. However, if more than three speeds are included in the Performance Table, the manufacturer should identify which speeds are energy-efficient (i.e., qualify) so that the consumer can identify those that offer the greatest energy savings.

Standby Power

Under the current specification, fans must consume no more than 1-watt of power in standby mode under Tier II requirements. To date, EPA does not have sufficient data to determine whether or not a 1-watt standby power requirement is appropriate for ceiling fans and if so, how it should be measured, collected, and reported. There is no standby requirement at this time, however, EPA is interested in working with ceiling fan partners and participating ceiling fan testing laboratories to collect data on standby power usage by ceiling fans. Based on this data, EPA will determine the appropriate levels, if applicable, for standby mode to be included in future specification revisions.

B. Lighting

Tier I

Qualifying residential ceiling fans sold with integral or attachable light kits must meet the requirements of the ENERGY STAR Residential Light Fixture specification. Similarly, attachable light kits, sold separately, must also meet the requirements of the residential light fixture specification. Partner should use the Ceiling Fan Qualified Product Information (QPI) form to report qualifying light kits. Visit www.energystar.gov/partners, click on Program Requirements under "Partner General Resources" to review and download the Residential Light Fixtures Program Requirements.

Qualifying residential ceiling fans sold without integral or attachable light kits must provide information on product packaging or with product instructions regarding ENERGY STAR qualifying light kits that may be used with that particular residential ceiling fan.

Tier II

No additional requirements

Note: Under the existing specification, screw-based compact fluorescent light bulbs (CFLs) will not be able to qualify as of October 1, 2003 (Tier II). To date, all but one ENERGY STAR qualified ceiling fan light kit include pin-based technologies. In addition, manufacturers have planned their product lines based on the Tier II pin-based only requirement under the existing specification. As such, the new (Version 2.0) specification will continue to exclude screw-based CFLs as of October 1, 2003 (Tier I). There are no additional lighting requirements under Tier II at this time.

4) **Controls**

Tier I

Qualifying products shall permit convenient consumer adjustment of fan speed. This may be accomplished by means of one or more wall-mounted switch(es), a remote control, or readily accessible pull chains. For purposes of this specification, "readily accessible" shall be defined as a length sufficient to reach a height of no more than 80 inches (203 cm) above the floor when the residential ceiling fan is mounted according to the residential ceiling fan's installation instructions. For those residential ceiling fans that can accommodate light kits, the lights and the fans must be able to be controlled separately, allowing users to switch off lights during fan operation or operate the lights without using the residential ceiling fan.

Qualifying products shall also provide for consumer adjustment of airflow direction (upward or downward) by one of the following means:

- A vertically or horizontally mounted slide switch on the motor housing. For vertically mounted switches, the downward position must correspond to downward airflow. For horizontally mounted switches, airflow direction must be clearly identified on the switch housing or within the product literature.
- A wall-mounted switch
- A remote control
- A readily accessible pull chain

Tier II

No additional requirements

Note: Adjustment of airflow direction, included as a Tier II requirement in the existing (Version 1.1) specification, has become a Tier I requirement in the new (Version 2.0) specification. It is EPA's understanding that most residential ceiling fan models offer this type of control; therefore, EPA is moving forward with the original effective date of October 1, 2003.

EPA received a request to allow horizontally mounted slide switches for freedom of design purposes. It is EPA's understanding that by adding this allowance, the overall fan efficiency and performance would not be affected. Therefore, horizontally mounted slide switches are permissible under the new (Version 2.0) specification.

While it is not EPA's intention to tell manufacturers how to design their products, it is important to inform the consumer of which direction the horizontal switch should be placed to achieve the desired airflow direction. This information should be provided in the fan model literature and/or on the fan housing.

5) **Sound**

No requirements at this time.

Note: EPA has conducted some preliminary research into the possibility of determining a standardized test method for measuring ceiling fan sound levels and including a minimum sound requirement under the ENERGY STAR specification for ceiling fans. There is currently no standardized testing method or standardized testing chamber requirements for ceiling fans. Therefore, EPA will need to conduct extensive research and dialogue with fan manufacturers and laboratory personnel before determining an appropriate sound level requirement, if applicable. EPA will work with existing noise testing laboratories to determine whether or not a test procedure can be applied to and developed for ceiling fans.

If a noise requirement is added to this specification under Tier II, all qualifying products shall also include a standardized label on the product package noting operational noise (i.e., dB) at each of three operating speeds. Each fan speed will be associated with a minimum airflow in CFM. A specification that includes sound level requirements, will also need to address, among other things: test chamber size and characteristics, type of measurement equipment, and type of sound being measured.

There are no sound requirements at this time, however, partners are encouraged to comment on EPA's interest in including a sound requirement in future specification revisions.

6) **Warranty**

Tier I

Qualifying products shall provide a warranty of at least 30 years for the motor and at least one year for all other components of qualifying residential ceiling fans. Residential ceiling fans sold with integral light kits also shall meet applicable warranty requirements under the ENERGY STAR Residential Light Fixture specification.

Tier II

No additional requirements

Note: Partners are expected to comply with the lighting warranty in effect at the time of qualification. Currently, there is a 2-year requirement for light kits; however, this requirement is subject to change based on revisions to the residential light fixture specification. If there are changes made to the required lighting warranty, partners will be notified and these changes will be reflected in the ceiling fan Qualified Product Information (QPI) form.

7) **Consumer Information**

Tier I

In addition to the ENERGY STAR, packaging of ENERGY STAR qualified residential ceiling fan models shall also state airflow, fan power consumption, and airflow efficiency at each of their three operating speeds, as determined by the test procedures specified in Section 3A, Airflow Efficiency. If the ceiling fan model offers more than three speeds, performance results should be provided for all

speeds on the packaging, indicating which three speeds were used to qualify the fan as ENERGY STAR. This information shall appear in the following form on the outside portion of the package:

Fan Speed	Airflow	Fan Power Consumption (without lights)	Airflow Efficiency (higher is better)
Low	__ CFM	__ watts	__ CFM/watt
Medium	__ CFM	__ watts	__ CFM/watt
High	__ CFM	__ watts	__ CFM/watt

Product operating and installation instructions shall include a short list of standardized information regarding how to operate the products efficiently. This list shall include, at a minimum, information about the following topics:

- adjusting fan speed and direction for season and room occupancy to maximize energy savings
- HVAC thermostat adjustment for energy savings when a ceiling fan is in use
- proper mounting distance from the ceiling to maximize efficient operation
- how to find proper replacement lamps for the light kit, if included

Tier II

No additional requirements

8) **Testing and Reporting Procedures:** Manufacturers are required to perform tests and self-certify each representative model that they intend to qualify as ENERGY STAR. In performing these tests, laboratories must use the test method described in EPA's *ENERGY STAR Testing Facility Guidance Manual: Building a Testing Facility and Performing the Solid State Test Method for ENERGY STAR Qualified Ceiling Fans*. When testing ceiling fan light kits, manufacturers must meet the testing and documentation requirements included in the ENERGY STAR Residential Light Fixture specification.

Note: This section replaces the existing (Version 1.1) Section 4: "Test Criteria". In addition, the description of the Solid State Test Method, included in the existing specification, has been replaced by a reference to EPA's ENERGY STAR Testing Facility Guidance Manual. Similarly, all references to the Solid State Test Method throughout this Version 2.0 document have been changed to direct partners to the new testing manual, which includes the Solid State Test Method.

A. Laboratory Testing

Under this specification, ceiling fans may only be tested by those laboratories who meet the guidelines provided in EPA's ENERGY STAR Testing Facility Guidance Manual and have been approved to test for ENERGY STAR qualification. EPA will conduct annual "round-robin" testing of these laboratories (i.e. calibrations), to verify that test results fall within +/- 3 percent of each other. This process will be performed using a reference fan provided by EPA. Laboratories that can test and qualify ceiling fans under ENERGY STAR, are identified on the ENERGY STAR Partner Resources Web page at www.energystar.gov/partners. Additional direction regarding the laboratory calibration procedure is provided in EPA's *ENERGY STAR Testing Facility Guidance Manual: Building a Testing Facility and Performing the Solid State Test Method for ENERGY STAR Qualified Ceiling Fans*.

Note: Under the current specification, laboratories are required to perform round-robin testing every six months. However, it was agreed by all laboratory personnel that a round-robin calibration once a year is sufficient and more cost-efficient.

If EPA believes that any of the laboratories are not meeting the criteria set forth in EPA's ENERGY STAR Test Facility Guidance Manual or the performance data provided by one or more of the laboratories seems inconsistent or questionable, EPA may ask for calibrations at any time outside of this annual requirement. If laboratory results do not come within +/- 3 percent of one another, EPA will work with the laboratories to address the problem and recalibrate so that all the testing facilities are able to provide consistent and repeatable results.

B. Reporting Requirements

The company whose brand name appears on the product packaging shall, for purposes of this specification, be considered the manufacturer. Manufacturers must complete a QPI form when submitting qualified products to EPA. This form must be accompanied by reports from a qualified laboratory containing airflow, power consumption, airflow efficiency data, and lighting test results (where applicable) for each residential ceiling fan model and light kits proposed for qualification. Families of residential ceiling fan models that are identical in every respect but finish may be qualified through submission of test data for a single representative model. Likewise, models that are unchanged or that differ only in finish from those sold in a previous year may remain qualified without the submission of new test data, assuming the specification remains unchanged. However, separate test data are required for all models that differ in any of the following characteristics:

- motor type or size
- rotational speed
- control type (if included with fan)
- blade weight, number, size, or pitch
- housing (i.e., size, design, ventilation)

Note: At the inception of this program, there were misunderstandings in regard to what is considered a ceiling fan "model" as defined in this specification. Results from the testing of a representative model may be used to represent additional fans, with different finishes, of the same model (family). However, differences in housing could affect performance of the fan. To clarify what constitutes a ceiling fan "model" under this specification, housing was added to the list of characteristics that require separate testing.

C. Challenge Process

Any ceiling fan manufacturing partner, or EPA, may challenge the test results for a particular product model qualified as ENERGY STAR. A manufacturer initiates this challenge process by providing a written request to EPA identifying the brand and model it would like to challenge, the reason for the challenge, the performance parameters in question, and a point of contact representing the challenging company. EPA will then notify the challenged partner of the challenge. At that point, the challenged partner has the following options:

1. Accept the challenge (see challenge testing described below);
2. Withdraw the model number from the ENERGY STAR Qualified Product List and address any labeling issues with EPA, including expeditiously removing the ENERGY STAR label from the model, its packaging, promotional materials, and/or Web site; or
3. Submit a plan of "corrective action" to EPA that recognizes the deficiency and outlines what changes will be made to ensure the product model will pass upon being subsequently tested by an independent laboratory. In this case, challenged partner must make appropriate

changes, which will be applied to all subsequent units manufactured under that model number, and submit the model to an independent laboratory for retesting within 90 days. If Partner exceeds this deadline, the model number will be taken off of the ENERGY STAR Qualified Product List.

If the challenged partner accepts the challenge, EPA will suggest an appropriate testing laboratory to the challenging company. **It is the responsibility of the challenging company to then contact the laboratory to provide them with the model to be tested. All costs of the challenge should be negotiated between the laboratory, challenging company, and challenged partner prior to testing.** All testing by the laboratory will be conducted in accordance with EPA's *ENERGY STAR Testing Facility Guidance Manual: Building a Testing Facility and Performing the Solid State Test Method for ENERGY STAR Qualified Ceiling Fans*. At the end of testing, the laboratory will provide the results to EPA, challenging company, and challenged partner.

If the test reveals that the sample unit meets the requirements of the ENERGY STAR specification, EPA will inform the challenged partner that no other action is required. In this case, the challenger must pay the laboratory for the cost of the challenge.

If the sample fails to meet the requirements being challenged, its challenged partner must pay for the cost of the challenge. If the product does not meet the requirements of this challenge process, it will be removed from the ENERGY STAR Qualified Product List. The challenged partner must take action to address the problem, retest, and resubmit testing results to EPA for the representative model to remain qualified as ENERGY STAR.

Note: EPA will not be responsible for the payment for or scheduling of the testing of the sample product. It is up to the individual laboratory and parties involved in the challenge to negotiate a contract for payment and acceptable timeline prior to testing. EPA will keep all challenge correspondence and resolutions on file.

Note: The challenge process is only open to participating ENERGY STAR partners and EPA; this has been clarified in the first paragraph of this section.

During the June 2002 ceiling fan industry meeting, partners indicated that there needed to be more direction and clarification regarding the challenge rule and procedure. The following were suggestions provided by the partners during that meeting which are addressed in this Version 2.0 specification:

1. the manufacturer being challenged should be notified prior to testing the product
2. the ceiling fan model in question should be tested at a laboratory other than the one that provided the initial testing.

More detailed direction is now provided regarding the challenge process and is based on the Home Ventilation Institute's (HVI) *Challenge Requirements and Procedure*. Partners can contact HVI directly to request this document at (847) 394-0159 or hvi@hvi.org.

EPA will not be responsible for purchasing or submitting the sample product to the chosen testing laboratory. As such, EPA is interested in receiving feedback on the following options for product purchase and submittal to protect the integrity of the product sample that will be tested: (1) challenging party, (2) challenged party, or (3) laboratory.

EPA is open to comments or suggestions on how to ensure that this process moves smoothly and that all parties involved are treated equitably.

9) **Effective Date:** The date that manufacturers may begin to qualify products as ENERGY STAR, under the Version 2.0 specification, will be defined as the *effective date* of the agreement. Any previously

executed agreement on the subject of ENERGY STAR qualified residential ceiling fans, shall be terminated on the effective date provided for each Tier, below.

A. Qualifying and Labeling Products Under the Version 2.0 Specification

1. Tier I
   The first phase, Tier I, shall go into effect on October 1, 2003 and conclude on a date **TBD**. All products, including models originally qualified under Version 1.1, with a **date of manufacture** on or after October 1, 2003, must meet the new (Version 2.0) Tier I requirements in order to bear the ENERGY STAR on the product or in product literature. The **date of manufacture** is specific to each unit and is the date (e.g., month and year) of which a unit is considered to be completely assembled.

2. Tier II
   The second phase, Tier II, shall go into effect on a date **TBD**. All products, including models originally qualified under Tier I, with a **date of manufacture** on or after a date **TBD**, must meet Tier II requirements in order to bear the ENERGY STAR on the product or in product literature.

Note: As of October 1, 2003, all models that qualify under the current Tier I specification, but do not meet the new Version 2.0 Tier I requirements, must be retested and resubmitted to remain qualified as ENERGY STAR. Based on the manufacturing cycle and other considerations, such as product design changes and retesting, EPA encourages manufacturers to provide suggestions for an appropriate Tier II effective date.

B. Elimination of Grandfathering: EPA will not allow grandfathering under this Version 2.0 ENERGY STAR specification. **ENERGY STAR qualification under Version 1.1 is not automatically granted for the life of the product model.** Therefore any product sold, marketed, or identified by the manufacturing partner as ENERGY STAR must meet the current specification in effect at that time.

Note: Under Version 2.0, EPA has made a significant change with regard to product qualification and labeling during specification transitions. EPA has made this important programmatic change for two reasons:

1. To deliver on expectations about ENERGY STAR by ensuring that the products perform at levels promised by the program.
2. To ensure that ENERGY STAR's ability to differentiate more efficient products is not undermined by high percentages of labeled products qualifying at less stringent performance levels.

10) **Future Specification Revisions:** ENERGY STAR reserves the right to change the specification should technological and/or market changes affect its usefulness to consumers, industry, or the environment. In keeping with current policy, revisions to the specification are arrived at through industry discussions.